

# Using the Analytical Procedures to Predict the Failure of Business Organizations

## “Field Study on Auditing Offices in Kingdom of Bahrain”

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### Abstract

The Study aims at knowing the effects of the analytical procedures on the ability to predict the financial failure in the Kingdom of Bahrain. The suitable hypotheses have been made concerning the abnormal clauses and guidelines. Therefore, a questionnaire has been prepared and distributed to all auditing offices in the Kingdom of Bahrain. The samples of study are 35 auditors.

The Study Produces the Following Results:

There is a statistically functioning relation between the analytical procedures and the abnormal clauses discovered in the financial statements by the external auditors in the Kingdom of Bahrain. The value of correlation coefficient amounts to (.421) and this value statistically functions at ( $\alpha \leq 0.01$ ) . The results show that the analytical procedures explain 117% of the difference.

There is a statistically functioning relation between the available analytical procedures and the ability to discover the indicators of the warnings about the companies early enough before their bankruptcy. The correlation coefficient amounts to (.553) and this statistically functions at ( $\alpha \leq 0.01$ ). The results show that the warnings about companies if found early enough before their bankruptcy they shall explain 305 % of the difference.

### Important Recommendations

Legislation must be enacted to oblige the companies to reveal the abnormal clauses in their financial statements if their relative significance exceeds 3% of the total budget.

Raising the awareness among companies to issue guidelines for predicting any future financial failure and about their importance in determining the future strategies

**Keywords:** The analytical procedures, The abnormal clauses in the financial statements Discovering guidelines, Predicting the inability of the companies, Analytical Operations Are Carried out, Normal Modeling approach

### 1.Introduction:

In the nineties of the last century, important events took place such as globalization and the related prevalence of the market economy; dissemination of knowledge economy; freedom of goods transport, services and investment and the obviously increased holding and affiliated companies. In the communities, the cognitive thoughts have developed in respect of the investment nature in the joint stock companies. Such events resulted in developing the financial markets and their qualitative progress. These events and variables obliged the accounting profession to get ready to face the globalization requirements and its produced developments and showed the urgent need for an effective evaluation and financial risks management. This coincided with the great responsibilities of the governmental control, the invitation to develop the legal accounting system and the supervision on the output quality and promotion. All these developments are evidently reflected on the monitoring process and auditing which examines the application of the methods and technologies providing indicators useful for predicting expected defects suffered by business organizations. Thus, the auditing process is conducted through using the financial analysis or analytical auditing which tends to determine the expected value of the activity based on the historical relation between the financial statements paragraphs and their precedents. The expected value of any account is determined according to the historical relations between the financial statements. The analytical procedures are a contemporary technology used in the auditing process conducted by the auditors during preparing auditing programs. Thus, the clauses expected to contain essential errors are focused on and further

evidence is requested if the internal monitoring system is weak and remarkably unreliable. Therefore, the external auditor necessarily needs to carry out analytical procedures because the report system and the traditional financial statements are insufficient or for saving the time and the costs of the auditing process.

Therefore, the research studies the analytical procedures used by the external auditors to find out the glaring errors and to predict the failure of the business organizations through case study on legal auditing offices in kingdom of Bahrain.

### *1.1 Problem of Study*

Severe competitiveness and the several business organizations emerged due to the globalization system resulted in making incorrect decision badly affecting these organizations future. Therefore, the external auditor has to follow up these cases and to use technologies showing the weaknesses and strengths of the business results. Thereupon, the study problem focused on the ability of the external auditor to find out the glaring errors in the financial statements through analytical procedures. Such statements may contain relatively significant errors and deviations affecting the continuity of the business organizations due to deluding the decision maker. Consequently, it is important to determine the ability of the auditor to predict the failure of the business organizations.

### *1.2 The Study Questions*

The study questions are based on the required objectives and they include the following:

- a.** What is the relation between the analytical procedures and the abnormal clauses in the financial statements?
- b.** What is the relation between the analytical procedures and the warnings about the companies discovered early enough before their bankruptcy?
- c.** What is the relation between the analytical procedures and predicting the inability of the companies to prospectively engage in their usual activity?

### *1.3 The Study Importance*

Such study determines the ability of the external auditor who uses the analytical procedures to find out the glaring errors in the financial statements which may contain relatively significant errors and deviations affecting the continuity of the business organizations due to deluding the decision maker. Moreover, it determines the ability of the external auditor who uses the analytical procedures to provide the indicators predicting the business failure.

This study shows important corroborative evidence which is the analytical procedures and determines their relation to discovering the essential errors and deviations and to predicting the business failure. Therefore, the study helps the auditor to correctly plan the auditing process and to get the required reliability degree to ensure good results produced from the statistic sample. Thus, auditing risks are reduced. Furthermore, these procedures help the auditor to save the time and the costs of the auditing through using the statistic sample containing the most important clauses.

### *1.4 The Study Objective*

The study aims are as follows:

- a.** Studying the relation between the analytical procedures and the abnormal clauses discovered in the financial statements.
- b.** Studying the relation between the analytical procedures and discovering guidelines of the warnings about the companies early enough before their bankruptcy.
- c.** Studying the relation between the analytical procedures and predicting the inability of the companies to prospectively engage in their usual activities.

### *1.5 The Study Hypotheses:*

The study hypotheses in the nihilism form are as follows:

- a. There are no statistically functioning relations between the analytical procedures and the abnormal clauses discovered in the financial statements.
- b. There are no statistically functioning relations between the analytical procedures and discovering guidelines of the warnings about the companies early enough before their bankruptcy.
- c. There are no statistically functioning relations between the analytical procedures and predicting the inability of the companies to prospectively engage in their usual activities.

### 1.6 The Study Variables

Table 1. shows the relation between the analytical procedures as an independent variable and the three dependent variables as herein referred.

### 1.7 The Study Methodology

1. The study sample and community: the study community consists of 21 legal auditing offices in kingdom of Bahrain. The study sample is random and simple and includes only 33 external auditors.
2. The study tool and data collection methods:
  - a. The relevant theoretical studies which are considered good references in this field, periodicals, specialized researches and previous studies.
  - b. The method of data collection is through the questionnaire prepared for this purpose.
  - c. The used statistic methods: the statistic programming shall be used T-SPSS test.

## 2. The Previous Studies

There are several studies focusing on the importance of using the analytical procedures to infer the insolvent companies expected to collapse. Some of such studies are as follows:

### 1) (William F & Others) 2011 Two Decades of Behavioral Research on Analytical Procedures: What Have We Learned?

Such study shows the nature of the researches referring to the analytical procedures used by the external auditors during the two past decades and focuses on four behavioral results which are as follows: "develop an expectation, establish tolerable differences, compare the expectation to the recorded amount and investigate significant differences, and evaluate explanations and corroborative evidence". The research results indicate that most researches focus on the performance of the auditors who use the analytical procedures such as investigating differences and evaluating evidence. A few researches focus on the essential aspect of the process such as creating expectations and determining thresholds and phases. Moreover, the research results show that most researches focus on the preliminary analysis and testing the auditor ability to make judgments and decisions.

### 2) (Nassar and Others) (2008) "the Importance of Using Analytical Procedures in Auditing Phases Carried out by the Department Auditor and How Much They Are Reliable Based on the General Audit of Accounting Department"

The research confirm the importance of the analytical procedures steps followed by the auditor in the accounting department in Kuwait with all their planning and practical phases in revealing weaknesses and strengths in the balances through which the clauses subject to audit will be determined. Through the investigation conducted by the researchers, it is established that there were defects in using the analytical procedures in the accounting department due to failing to understand and realize the general guide. Moreover, the time sufficient to carry out the analytical procedures is undefined and the right time, whether to be before, after or during the audit, is not exactly determined.

### 3) (Steven M.G & Others) (2004) "Why Do Auditors Over-Rely on Weak Analytical Procedures? The Role of Outcome and Insensitivity to Precision"

Such study aims at doing two tests. First test studies why the external auditors rely on weak procedures analysis without using their experience and knowledge in investigating the causes when the balances refer to unsatisfactory results. Such tests conclusively prove that the external auditor gives more importance to the weaknesses. The second test focuses on how the outputs obviousness and clearness draw the external auditor attention and increase his sensitivity to the weaknesses when he uses the analytical procedures. The test results

affirm the relation between the importance and validity of the analytical procedures to the clearness and reliability of the evidence used in the analysis process.

**4) AlGhosin Study (2004) “Using Financial Percentage for Predicting Companies’ Solvency – Applied Study on the Construction Sector in Gaza”**

The study aims at developing a mathematical model consisting of financial ratios according to which it is distinguished between solvent and insolvent company. In this study, logistic regression is used to reach the best model of financial ratios.

The most important result is a model consisting of financial ratios giving indicators upon which the insolvent organizations are inferred in construction Sector.

The study recommends using the financial ratios analysis. This analysis is important for providing significant indicators to the companies’ condition and drawing their attention to its significance.

**5) (Islamaboly ) study (2003) ““Using Financial Ratios for Predicting the Insolvency of Public Food Industry Companies in Syria”**

This study aims at testing the possibility of using the financial ratios in developing the mathematical model which can be used in predicting the insolvent public food industry companies in Syria. Ten financial ratios are tested and the analytical method is applied to them in order to select the best ratios in distinguishing between successful companies from insolvent ones.

The most important result is a three ratio model: sales profit, quick liquidity ratio and the total debts against the total assets.

This study is more distinctive than the precedents because it discusses the ability of the legal auditing offices in Oman to use the analytical procedures in order to discover the glaring errors and to predict the business failure.

**6) (Asare S & Others) Study (2003) “Consideration for Research on Analytical Procedures”**

This study discusses the contribution of the analytical procedures researches to the auditor performance. Lately, there are trends towards depending on these technologies. Thus, the research attempts to understand and explain the analytical procedures. The research focus on three aspects: accepting the logical analysis, collecting information to test the logic and recognizing the different cases which should be analyzed and followed up. The research concludes that following the steps of understanding the surrounding circumstances of work, accurately analyzing the ratios and then correctly evaluating the business results will lead to choose the accurate and correct decision from the possibilities.

**7) (Steven M.G & Others) Study (2001): Analytical Procedures and Audit Planning Decision**

This Study aims at using the analytical procedures in planning the auditing decision on time and scheduling. The oscillation of information quantity unsupervised by the auditor and the results produced from audit will inevitably lead to risks increase and errors negligence. Thus, the decision making process will be weak. The research examines the decision made by the external auditor concerning his ability to review the preliminary auditing process after the analytical procedures process is conducted. This measure will increase the trust in the auditing process clearly manifested in the applied case conducted by the researcher.

### **3. The Concept of Auditing**

Auditing is a word derived from Latin language and means someone who speaks loudly. Auditing mainly means that information or financial data of any organization, irrespective of its aims and size or legal form, are inspected by an independent and neutral person. American Accounting Association defines auditing as procedures organized for obtaining evidence related to economic acknowledgments (balances) and events and objectively evaluating them to determine the relation between these acknowledgements and a certain scale. Thus, the results will be delivered to the beneficiaries. (Al-Tamimi, 2006)

### **4. Nature of Analytical Procedures**

The analytical procedures include various technologies used by the auditor to study the relations between the given data and to ascertain its reasonableness. Such data may be financial or nonfinancial and obtained from external or internal resources. Again, the analytical procedures generally examine the numbers used in the financial statements to ascertain their relatedness and if they are in harmony with the auditor knowledge of the organization and its activity.

The auditor may adopt the analytical procedures when he supposes that there is a relation between the mathematical operations contained in the financial condition and between operations in the accounts to nonfinancial data. The analytical procedures includes as follows:

- Studying the change of the account balance in previous periods shall result in expecting the conditions in the present period (for example, regularly paying a certain loan for years)
- Comparing the financial information to the potential results (for example, inspecting the final numbers variables in relation to budgets and expectations)
- Studying the relation between the account balances for a certain period (for example interests payable on loans)
- accounts enabling to create expectations related to a certain balance (for example, through using data from an independent source and related to average reward numbers and equation to prematurely know total costs of users during the study period. B- through using the data given from farmers environment to prematurely know the yield produced from a hectare in favor of the farmers)
- studying the relation between financial and non-financial information ascertaining the knowledge acquired by the auditor around the data; drawing the attention to unfamiliar and unexpected numbers reflecting the internal operations (for example (a) the licenses income against their numbers (b) import rights against imported materials data (c) farming storage costs against stock records)
- The anticipatory analytical procedures are largely used to get the convincing elements in the framework of conducting affirmative investigation.

#### *4.1 Possibility of Using Analytical Procedures*

The use of analytical procedures is related to certain elements such as

The agency nature and activity: the procedure through which the account balances and the operation is fairly and accurately expected, the organized knowledge obtained from the previous monitoring operations, information availability whether being financial or non-financial, reliability of all available information forms and harmony and independence of the information obtained from different sources.

#### *4.2 Analytical Operations Are Carried out*

The financial information is evaluated through studying the relation between the financial and non-financial paragraphs (balances). The analytical procedures are used for the following purposes:

1. In the preliminary planning to assist the auditor to determine the nature and time of the auditing procedures.
2. In the detailed auditing phase to obtain evidence concerning certain acknowledgments related to activity or balances.
3. In the final phase, to compare the ostensible balances in the financial statements of the present year with their previous year precedents to discover any deviations and inspect their causes.

In addition to all the aforementioned information, the analytical procedures are useful for planning phase in understanding the client activity and in recognizing the deviations and financial fluctuations which may be considered an indicator to matters should be taken into consideration in the previous detailed auditing phase.

#### *4.3 Analytical Procedures in revenue and receivables cycle*

These procedures show the relation between the accounts and unclear errors during the phase of evaluating the risk monitoring. Such procedures may show the relation between sales, revenue and debt collection. This measure assists the auditor in evaluating risks. The relation between revenue and other accounts are audited and compared to their precedents and to the expectations of the estimative budget. Such relation includes the indicator of the cash receivables in relation to sales. Furthermore, it includes allowances, sales and selling costs (Dahdoh et al. 2009. p 125). Production line of sales may be compared with another and account balances may be monthly compared with their precedents.

The client's reaction to the results of the analytical auditing procedures can give some indicators to the auditor concerning the client's monitoring quality. For example, prompt and logical answers to questions concerning fluctuation of total profit margins from last year to the present one provide indicators during lack of adverse evidence that the organization conditions are monitored by the client management and monitoring procedures are

properly working as planned. The analytical procedures have an effective impact on conducting essential tests as ability to debt repayment.

#### *4.4 Analytical Procedures in Purchases and Expenditures Cycle*

Analytical procedures show the relation between the accounts and the inherent risks in the operations contained in purchases and expenditures cycle. The analytical procedures can show the expenses trends which help the auditor to evaluate the risks volume. The relation between the expenses account and other accounts can be analyzed and compared with their precedents and with expectations set forth in the budget of these operations (Dahdoh et al. 2009 p 178)

The auditing and comparisons documents are prepared as a guide referred to in the reports prepared by the external auditor. Some of the auditing conducted by the management and appearing in the internal reports are as follows:

1. Total profit against the budget
2. Revenue and allowances trends
3. Term of the debt
4. Open purchase contracts

#### *4.5 Types of Analytical Procedures*

The analytical procedures depend on several indicators to accurately produce results ensuring the correctness of the relation between the variables which are in harmony with the strategic objectives of the economic unity. Such indicators include as follows:

First: financial ratios are considered an analytical tool used for a long time and study the elements in the financial statements as well as the accounting reports to give significance to the data of these statements. The financial ratio refers to the relation between two variables which are numerator and denominator. In other words, such proportion studies the relation between elements and others. (Mohammed, et al. 2005)

### **5. Analysis of Trends**

The analysis of trends is considered the most popular way of the analytical procedures. It is the analysis of the changes in the balance of a certain clause or element during the previous accounting period. The analysis generally focuses on comparing the balances in the present year with their precedents in the previous year to ascertain if there an obvious difference between the sums and the trends. Thus, the trend is expected concerning the present year (Lotfy. 2005)

There are several analysis technologies of trends. Complex technologies result in accurate expectations harmonizing with the affirmative investigations. Being complex, such technologies require enormous effort in monitoring to make balance between costs and each technology merit. Such technologies include as follows:

- Planning methods
- Comparing each practice with another
- Equilibrium equation
- Dynamic equation
- Serial analysis
- Multivariable technologies as used in regression analysis

**First:** regression analysis is a statistical method helping to predict average random variable (s) based on values and measures of other random variables. It always depends on the relative relation. Thus, the independent variable change mainly results in changing the dependent variable.

**Second:** indicators analysis depends on comparing the relation between the accounts in the financial statements to non financial data or comparing the relation between organizations working in the same industry. For example, analyzing all account balances either as ratios to total assets or ratios to total revenue which is called



revenue analysis deemed to be the most suitable method when the relation between the accounts is obviously and stably predictable” (Lotfy .2007)

## **6. Commonly Based Indexation**

Commonly based indexation depends on comparing income and expenses books with all income books or comparing receivables books to total assets. For example, comparing paid interests rate with loans. This method is useful for comparing revenue and expenses books with total revenue from one practice to another.

## **7. Analysis of Financial Ratios**

Analysis of financial ratios depends on comparing balances representing the financial conditions to recognize the mutual link between them and to determine the changes occurring to this link in a certain period. Discovering the link between the account balances helps the auditors to understand the information in the financial statements.

The auditor can use various financial ratios according to the organization nature and conditions. The important ratios inspected in the commercial construction are as follow: total profit margin (adding the exploitation result to sales), savings turnover (adding selling costs to saving value) and term for paying debt (adding debt to total sales). In the short run, some financial ratios related to liability are an important procedure showing the ability to meet commitments. Moreover, such method draws attention to financial liquidity problems:

Analyzing ratios is an ineffective method unless the following conditions are fulfilled:

- Ratios are always calculated with the same methodology during comparison
- Numbers of different operation and/ or different balances subject to comparison must be reckoned according to the same accounting methods
- The share is supposed to be relatively stable from one financial year to another.

### *7.1 Prediction Analysis*

It is an analytical procedure with certain calculations which use financial data and exploitation data to prepare sums expectation based on understanding possible relations:

Prediction analysis is the most effective method. However, its effectiveness depends on the following factors:

- Determining reasonable relations
- Taking into consideration suitable anticipatory indicators
- Unsuitable anticipatory indicators must not be taken into consideration
- Suitable non financial exploitation data as well as financial data should be used

### *7.2 Anticipatory Monitoring Models*

Anticipatory monitoring processes can be used by the auditor to inspect the accuracy of remuneration expenses and comprehensive quality. The auditor may use simple or complex technologies to create expectation as to the nature and quality of the available data (for example using normal modeling approach)

### *7.3 Normal Modeling approach*

This approach aims at expecting remuneration expenses. It is considered effective when reliable information is used concerning the actual numbers and ranks from independent employees system through which the remuneration data is obtained. To get preliminary estimation, the auditor tries to predict the total remuneration during the period under study. Thus, the actual number of each rank is multiplied by the average value of remuneration scale of each rank. However, this approach disregards the actual number of each rank in different remuneration scale. Previous information may be used by the auditor concerning each rank. To clear the atmosphere, an average rate for each rank is used. It is better to use the average value of each scale. Other variables may be taken into consideration as annual bonuses related to the good performance. Such bonuses are important for the total value of the account under inspection.

## **8. Analyzing and Discussing the Study**

### *8.1 Results of Study*

### **First: Results concerning the Responses Made by the Individuals of the Study Sample to the Abnormal Clauses in the Financial Statements**

To recognize the responses made by the individuals of the study sample to the abnormal clauses in the financial statements, the arithmetic mean and standard deviations are calculated as to the response made by the study sample to external auditors in Kingdom of Bahrain concerning the paragraphs about such matter and to arrange the response according to variation coefficient. Table (3) shows the results of analysis.

According to table (3), the fifth paragraph stipulating “Can the auditor discover insolvency of the project through the analytical procedures conducted on it?” is ranked first as to the lowest value of the variation coefficient of (12.8%), arithmetic mean of (4.82) and standard deviation of (0.55). The first paragraph stipulating “Do the analytical procedures assist in discovering the manipulation into sales to increasingly affect the business results in order to raise the share price in the stock market?” is ranked fifth and last as to variation coefficient of (51.1%), arithmetic mean of (3.61) and standard deviation of (0.71).

### **Second: Results of the Response Made by the Individuals of the Sample Study to Discovering Guidelines of Warnings about the Companies Early Enough Before their Bankruptcy**

To recognize the responses made by the individuals of the sample study to discovering guidelines of warnings about the companies early enough before their bankruptcy, arithmetic mean and standard deviations are calculated as to the response made by the individuals of the study sample to external auditors in Kingdom of Bahrain concerning the paragraphs about such matter and to arrange the response according to variation coefficient. Table (4) shows the results of analysis.

According to table (4), the third paragraph stipulating “Do you think that analytical procedures can be used for measuring and evaluating profitability and liquidity of the project and recognizing its efficiency and financial increase?” is ranked first as to the least value of variation coefficient of (11.5%), arithmetic mean of (4.68) and standard deviation of (0.58). The first paragraph stipulating “Do you think that comparing profit distribution ratios in the present year with their precedents through the analytical procedures provides an indicator of financial deficit faced by the project?” is ranked fourth and last with variation coefficient of (24.4%) and arithmetic mean of (3.71) and standard deviation of (0.91).

### **Third: Results related to the Responses Made by the Individuals of the Study Sample concerning Predicting the inability of the Companies to Engage in their Usual Activity in the Future**

To recognize the responses made by the individuals of study sample related to predicting the inability of the companies to engage in their usual activity in the future, arithmetic mean and standard deviations are calculated by the external auditors in Kingdom of Bahrain as to the response rate made by the study sample concerning the paragraphs related to this matter. The response is ranked according to variation coefficient. The analysis results are shown in table (5).

According to table (5), the first paragraph stipulating “Can the auditor use the analytical procedures to evaluate whether the project shall continue the usual activities according to which the financial statements are made or not?” is ranked first as to the least value of coefficient correlation of (9.22%), arithmetic mean of (4.79) and standard deviation of (0.41). The third paragraph stipulating “Do you think that the external auditor failure to provide early warning about the problems facing the projects in the near future contributes to their inability to engage in activity?” is ranked last.

## **8.2 Results of Hypotheses**

### **Results Related to the First Hypothesis:**

“There is no statistically functioning relation between the procedural analyses to the abnormal clauses discovered in the financial statements by the external auditor in Kingdom of Bahrain”.

To ascertain the first study hypothesis, Pearson Correlation coefficient is used. It is used to discover the relation between the procedural analyses to the abnormal clauses discovered in the financial statements by the external auditor in Kingdom of Bahrain”.



According to results of analyzing table (6), there is a statistically functioning relation between the procedural analysis and the abnormal statements discovered in the financial statements by the external auditor in Kingdom of Bahrain. The correlation coefficient reaches (0.421) statistically functioning at ( $\alpha \leq 0.01$ ). The results shows that available analytical procedures explain 117% of difference and the abnormal statements discovered in the financial statements by the external auditor. Thus, the available analytical procedures contribute to increasingly discovering the abnormal statements in the financial statements.

### Results Related to the Second Hypothesis

“There is no statistically functioning relation between the analytical procedures and discovering warnings about companies early enough before their bankruptcy.

To ascertain the second hypothesis, Pearson Correlation Coefficient is used to find out the relation between the available analytical procedures and discovering warnings about companies early enough before their bankruptcy.

According to the results of table (7), there is a statically functioning relation between the available analytical procedures and discovering warnings about companies early enough before their bankruptcy. Correlation Coefficient reaches (0.0553) which is statically functioning at ( $\alpha \leq 0.01$ ). The results show that available warnings about companies early enough before their bankruptcy explain 305% of difference. Thus, the available analytical procedures contribute to improving the ability to discovering early warnings.

### Results Related to Third Hypothesis

“There is no statistically functioning relation between the analytical procedures and predicting that the company is unable to continue the usual activity in the coming period”

To ascertain the third hypothesis, Pearson Correlation Coefficient is used to discover the relation between the available analytical procedures and predicting that the company is unable to continue the usual activity in the coming period.

According to the results of table (8), there is a relation between the available analytical procedures and predicting that the company is unable to continue the usual activity in the coming period. The value of correlation coefficient reaches (.623) which is statistically functioning at ( $\alpha \leq 0.01$ ). The results show that the correct prediction of the company inability to continue the usual activity during the coming period explains 388% of difference. Thus, the available analytical procedures contribute to improve the ability to predict that the company is unable to proceed with the activity during the coming period.

## 9. Conclusion

- There is a statistically functioning relation between the procedural analysis and the abnormal statements discovered in the financial statements by the external auditor in Kingdom of Bahrain. The correlation coefficient reaches (0.421) statistically functioning at ( $\alpha \leq 0.01$ ). the results shows that available analytical procedures explain 117% of difference.
- There is a statically functioning relation between the available analytical procedures and discovering warnings about companies early enough before their bankruptcy. Correlation Coefficient reaches (0.0553) which is statically functioning at ( $\alpha \leq 0.01$ ). The results shows that available warnings about companies early enough before their bankruptcy explain 305% of difference.
- There is a relation between the available analytical procedures and predicting that the company is unable to continue the usual activity in the coming period. The value of correlation coefficient reaches (.623) which is statistically functioning at ( $\alpha \leq 0.01$ ). The results show that the correct prediction of the company inability to continue the usual activity during the coming period explains 388% of difference.

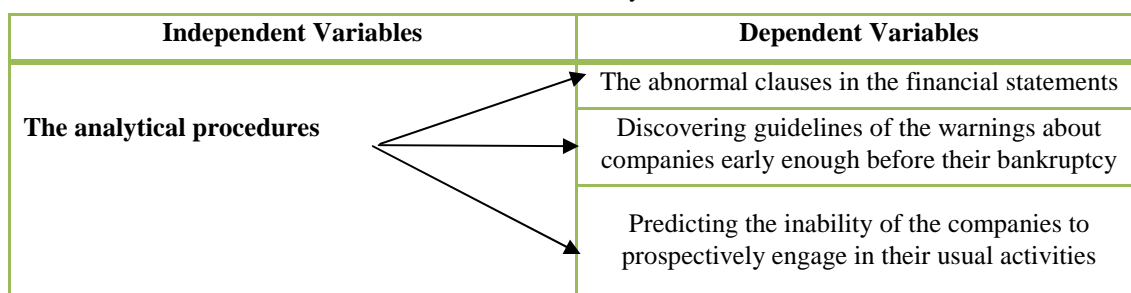
## 10. Recommendations

- 1- Legislation must be enacted to oblige the companies to reveal the abnormal clauses in their financial statements if their relative significance exceeds 3% of the total budget.
- 2- Raising the awareness among companies to issue guidelines for predicting any future financial failure and of their importance in determining the future strategies.
- 3- Innovating courses specialized in the field of financial failure and in prediction process. To hold symposiums inside and outside the kingdom.

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**Table 1.** The Study Model



**Table 2.** The steps of the analytical procedures in revenue and receivables cycles

Analytical Procedure	Potential Deviation
Comparing the total profit with the precedent for each production line in the last year	Increase or decrease in sales and debit
Monthly comparing sales for each production line all the time	Increase or decrease in sales and debit
Comparing the revenue and selling allowances as ratios of total sales with the same ratio for each production line in the last year	Increase or decrease in revenues, sales allowances and debit
Comparing the individual's balances of certain values with their precedents	Deviations in debits and income accounts
Comparing bad debts as ratios of total sales with their precedents	Recognizing debit and uncollectible accounts which have no allocation
Comparing number of days during which there are uncollectible accounts with their precedents	Increase and decrease in allocation of uncollectible accounts and bad debts
Comparing discount as ratios of total debit with their precedents	Recognizing good debit accounts
Comparing time categories as ratios of debits with their precedents	Increase and decrease in the allocation of uncollectible accounts and bad debts
Comparing the allocation of doubtful debts as ratios of debts with their precedents	Increase and decrease in the allocation of doubtful accounts and bad debts
Comparing selling expenses through multiplying net sales by average expenses with the same recorded in books of the present financial year	Increase and decrease in selling expenses and related dues

Source: (Dahdoh & Others 2009 page 127)

**Table 3.** Arithmetic mean and standard deviations to the response made by the individuals of the study sample to measuring paragraphs related to the abnormal clauses in the financial statements

No	Paragraph Text	Arithmetic Mean	Standard Deviation	Variation Coefficient	Rank
1	Do the analytical procedures assist in discovering the manipulation into sales to increasingly affect the business results in order to raise the share price in the stock market?	3.61	0.71	15.1%	5
2	Can the auditor depend on the analytical procedures to find out the glaring errors in the financial statements?	4.20	0.70	14.2%	2
3	Is it possible to discover the deviation in the cost of the sold goods through the material turnover?	4.55	0.66	13.8%	3
4	Is it possible to discover the deviations in selling commission through adding them to net sales?	3.85	0.64	14.2%	4
5	Can the auditor discover insolvency of the project through the analytical procedures conducted on it?	4.82	.55	12.8%	1

**Table 4.** Arithmetic mean and standard deviations are calculated as to the response made by the individuals of the study sample to discover guidelines of warnings about the companies early enough before their bankruptcy

No	Paragraph Text	Arithmetic Mean	Standard Deviation	Variation Coefficient	Rank
1	Do you think that comparing profit distribution ratios in the present year with their precedents through the analytical procedures provides an indicator of financial deficit faced by the project	3.71	0.91	24.4 %	4
2	Can the auditor predict the project failure through the analytical procedures (by using ratios of revenue to costs and comparing the invested capital revenue with revenue of similar investments?	4.42	0.68	14.4%	2
3	Do you think that analytical procedures can be used for measuring and evaluating profitability and liquidity of the project and recognizing its efficiency and financial increase?	4.68	0.58	11.5%	1
4	Can the auditor discover through the analytical procedures that the company is intended to be liquidated by the management rather than the shareholders?	4,03	0.98	23.1%	3

**Table 5.** Arithmetic mean and standard deviations are calculated as to the response made by the study sample concerning the measuring paragraph prepared for predicting the inability of the company to engage in the usual activity during the coming period.

No	Paragraph Text	Arithmetic mean	Standard Deviation	Variation correlation	rank
1	Can the auditor use the analytical procedures to evaluate whether the project shall continue the usual activities according to which the financial statements are made or not?	4.79	0.41	9.22%	1
2	Do you think if the project continuity is doubted according to the analytical procedures showing liquidity problems, profits decrease and losses increase in that the auditor has to make reservations in his report?	4.55	0.66	16.22%	3
3	Do you think that the external auditor failure to provide early warning about the problems facing the projects in the near future contributes to their inability to engage in activity?	4.61	0.68	16.32%	4
4	Do you think that financial ratios and equation (such as capital ratio to total assets, retained profits ratios to total assets and sales ratios to total assets) made by financial analysis experts are related to predicting project bankruptcy and inability to continue?	4.85	0.49	10.15 %	2

**Table 6.** The relation between the procedural analysis and the abnormal clauses discovered in the financial statements by the external auditor in Kingdom of Bahrain

variable	Abnormal Clauses in Financial Statements		
	Correlation Coefficient (R)	Determination Coefficient (R <sup>2</sup> )	Functioning Level
Analytical Procedures	** 0.4214	0.1173	0.000

**Table 7.** Results of Correlation Coefficient and Determination Coefficient showing the relation between the analytical procedures and discovering warnings about companies early enough before their bankruptcy

variable	Discovering Warnings about Companies Early Enough before their Bankruptcy		
	Correlation Coefficient (R)	Determination Coefficient	Functioning Level
<b>Analytical Procedures</b>	** 0.5534	0.3051	0.000

Such relation is \*\* functioning at level 0.01

**Table 8.** The relation between the analytical procedures and predicting that the company is unable to continue the usual activity in the coming period

variable	Predicting that Inability of the Company to Continue the Usual Activity in the Coming Period		
	Correlation Coefficient (R)	Determination Coefficient (R <sup>2</sup> )	Functioning Level
<b>Analytical Procedures</b>	** 0.6234	0.3883	0.000

Such relation is \*\* functioning at level 0.01



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